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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,779	04/16/2004	Michael Sweeting	03-1083	1294

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EXAMINER	
JOHNSON, GREGORY L	

ART UNIT	PAPER NUMBER
3691	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/826,779	SWEETING ET AL.	
	Examiner	Art Unit	
	GREGORY JOHNSON	3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/30/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-38 are pending. Claims 1-38 have been examined.

Claim Objections

2. Claims 35-38 are objected to because of the following informalities:

Claims 35-38 recite "The system according to claim 34". However claim 34 is an apparatus claim, not a system claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-13, 15-29 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterffy et. al., Pub. No. 2004/0254804 (hereinafter Peterffy) in view of Konia, Pat. No. 7,225,151 (hereinafter Konia).

As to claims 1, 18 and 34, Peterffy discloses the following elements:

- A method for improving the price of an item, said method being implemented in an electronic trading system (¶0009-0010), comprising:
- providing a trading stack (e.g. Central Order Book; ¶0011 and ¶0024);
- receiving a price improvement order to trade said item at an improved price (¶0007-0008, ¶0046-0047 and ¶0072);
- assigning one of a plurality of price improvement levels to said order, said assigned price improvement level defines said improved price of said order such that said order is placed in a predetermined position within said trading stack (¶0040-0041 and ¶0072); and
- maintaining said position of said order in said stack until said order is matched or cancelled (¶0040 and ¶0031-0035).

Peterffy is silent on the price improvement level being dynamic (i.e. an order may increases its price improvement level such that it stays at least one level ahead of the next best order in the trading stack; from Applicants' Abstract).

However, Konia teaches a method for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. The method comprises checking for whether a first bid exceeds a second bid in an auction for determining continuing priority for

providing an ongoing service for at least a first and second bidder, wherein the relative priority for providing the service for the first bidder is dependent on whether the value of the first bid exceeds the value of the second bid, and wherein the relative priority for providing the service for the second bidder is dependent on whether the value of the second bid exceeds the value of the first bid. The method further comprises incrementing the first bid to a value exceeding the second bid if the first bid does not exceed the second bid, thereby causing the relative priority for providing service for the first bidder to exceed the priority for providing service for the second bidder. The steps of checking and incrementing may be executed a plurality of times (i.e. bids are dynamically adjusted; see Abstract and col. 12, lines 2-5).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the aforementioned elements as taught by Konia within Peterffy for the motivation of having a system that monitors the current rankings in auctions (e.g. trading systems) and automatically adjusts its bids according to rules defined by its user (col. 1, lines 27-29). In addition, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned elements as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

Peterffy discloses in Fig. 1 the trading network, including the exchange with a trading host and the price improvement period processor (PIP). However, Peterffy does not explicitly disclose the following elements:

- a plurality of workstations, each of said workstations comprising:
- a workstation storage device;
- a workstation processor connected to said workstation storage device, said workstation storage device storing a workstation program for controlling said workstation processor; and
- said workstation processor operative with said workstation program to receive a dynamic price improvement order to trade on an item at an improved price, and to display said order; and
- a server operative to communicate with said plurality of workstations and receive said dynamic price improved order, the server comprising:
- a server storage device; a server processor connected to said server storage device, said server storage device storing a server program for controlling said server processor; and
- said server processor operative with said server program.

However, Konia teaches that in an online auction bid management system (e.g. trading system) there are computers, servers, storage and processors (col. 3, lines 1-52). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the system architecture as taught by Konia, since the claimed invention is merely a combination of

old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

As to claims 2-4, 10, 19-21, 26 and 35-37, Peterffy fails to disclose to the following elements:

- said maintaining comprises adjusting the price improvement level of said order to maintain said predetermined position;
- said adjusting comprises increasing the price improvement level;
- said adjusting comprises decreasing the price improvement level; and
- said maintaining comprises: adjusting the price improvement level such that it is one level higher than the next best order in the stack, wherein the price improvement level can be adjusted up to a maximum price improvement level.

However, Konia teaches a method and system for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. Konia teaches that the system can perform checks for whether a vendor's bid is lower than all other bids in an auction (e.g. trading system). The vendor is allowed to choose a desired position and the system can determine the maximum that the vendor's bid need to be in order to obtain the priority position. If the system finds that the vendor has achieved the desired position with respect to the buyer server being processed, the system may increase the

bid to a maximum which allows the bidder to keep the desired priority. Otherwise, the system decreases the bid without lowering the bid below the minimum bid entered by the vendor (Abstract and col. 10, lines 53-67).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the aforementioned elements as taught by Konia within Peterffy for the motivation of having a system that monitors the current rankings in auctions (e.g. trading systems) and automatically adjusts its bids according to rules defined by its user (col. 1, lines 27-29). In addition, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned elements as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

As to claims 5-9, 11, 22-25, 27 and 38, Peterffy discloses the following elements:

- said predetermined position is the front of said trading stack (i.e. top of the book; ¶0040);
- assigning a timestamp to said order (¶0025);
- maintaining said position based on said timestamp (e.g. price/time priority; ¶0008);

- in the event two or more said dynamic price improvement orders are received, the orders with older timestamps are matched prior to orders with newer timestamps (¶0042);
- each one of said price improvement levels represents a fraction of a predetermined pricing increment for which the price of said item is improved upon (¶0047); and
- said predetermined position is the position of said order relative to other orders in said stack (i.e. top of the book; ¶0040).

As to claims 12 and 28, Peterffy discloses in ¶0053 the following elements:

- determining the price improvement level of a best order in said stack; and
- assigning a price improvement level to said price improvement order that exceeds the price improvement level of said best order by one price improvement level when the price improvement level of said best order is not a maximum price improvement level.

(e.g. a bid that is at least $0.01 greater than the bid of the NBBO at the time of commencement of the price improvement order)

In regards to Peterffy being silent on the price improvement level being dynamic, see the Examiners response to claim 1 above.

As to claims 13 and 29, Peterffy discloses the following element:

- The method according to claim 12, further comprising assigning said maximum price improvement level to said dynamic price improvement order when the price improvement level of said best order is at said maximum price improvement level (¶0024, ¶0047 and ¶0073-0087).

As to claims 15 and 33, Peterffy discloses the following element:

- said price improvement order is one of several price improvement order types selected by a trader using said electronic trading system (i.e. several types of order types can be submitted to the trading host and then the order could be submitted for price improvement into the PIP processor (¶0026-0035 and ¶0046).

In regards to Peterffy being silent on the price improvement order being dynamic, see the Examiners response to claim 1 above.

As to claims 16-17 and 31-32, Peterffy does not disclose the following element:

- decreasing the price improvement level of at least one price improved order submitted subsequent to a dynamic order such that the price improvement level of the at least one price improved order does not exceed the price improvement level of the dynamic order (i.e. adjusting the price/bid of an order so that it is not the highest price/bid); and

- the price improvement level of the at least one price improved order is decreased to a price improvement level one level below a maximum price improvement level when the at least one price improved order is submitted having the maximum price improvement level as its price improvement level.

However, Konia teaches a method and system for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. Konia teaches that the system is capable of adjusting the position of a bid to be lower than the highest bid (e.g. third priority position; ¶0060). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned element as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

6. Claims 14 and 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterffy and Konia as applied to claims 1 and 18 above, and further in view of Serkin et al., Pat. No. 7,209,896 (hereinafter Serkin).

As to claims 14 and 30, Peterffy fails to disclose the following element:

- said dynamic price improvement order is the default price improvement order type for a predetermined number of traders (i.e. the system provides the ability to set a default order type).

However, Serkin teaches a system for handling quotes in an electronic market, said system being capable of processing price improvement orders (Abstract and col. 10, lines 46-51). Serkin also teaches that the system uses a “point-and-click” window-type technology that provides a "default" order feature. It would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to include in the trading network of Peterffy, the above mentioned element as taught by Serkin, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY JOHNSON whose telephone number is (571)272-2025. The examiner can normally be reached on Monday - Friday, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, ALEXANDER KALINOWSKI can be reached on (571) 272-6771. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lalita M Hamilton/

Primary Examiner, Art Unit 3691